AMENDMENTS TO THE CLAIMS

IN THE CLAIMS

1. (Currently Amended) A method of reorganizing a table in a database file while providing clients of the database file continuous access to data stored in the table, the method comprising:

reorganizing data of an original table by copying the data to a reorganized table;

during the copying, allowing modifications to the data of the original table while collecting records of the modifications;

when the copying completes, applying the modifications from the collected records against the reorganized table;

applying a first trigger lock to the original table, the first trigger lock blocking select data modification operations against the original table while allowing other operations against the original table;

applying any remaining modifications from the collected records against the reorganized table;

B1 applying a second trigger lock to the reorganized table, the second trigger lock blocking select data modification operations against the reorganized table while allowing other operations against the reorganized table during the reorganization;

substituting the reorganized table for the original table; and

removing the second trigger lock, wherein additional more-restrictive locks to the original table are not needed during the method of reorganizing the original table, thereby providing clients of the original table continuous access to the data during the reorganization through at least the other operations allowed by the first trigger lock.

2. (Original) The method of Claim 1, wherein the other operations allowed by at least one of the first and second trigger locks comprises one or more structural modification operations.

3. (Original) The method of Claim 1, wherein the other operations allowed by at least one of the first and second trigger locks comprises one or more read-only operations.

4. (Original) The method of Claim 1, further comprising:

during the application of the modifications from the collected records against the reorganized table, allowing additional modifications to the data of the original table while collecting additional records of the additional modifications; and

when the modifications and at least portions of the additional modifications have been applied against the reorganized table, applying the first trigger lock to the original table;

wherein the step of applying any remaining modifications includes applying any remaining modifications or additional modifications against the reorganized table.

5. (Original) The method of Claim 1, wherein when the original table included one or more relational constraints, the method further comprises applying at least one of the one or more relational constraints to the reorganized table.

6. (Original) The method of Claim 5, wherein the application of the at least one relational constraint to the reorganized table includes applying a trigger procedure to the reorganized table.

7. (Original) The method of Claim 5, wherein the application of the at least one relational constraint to the reorganized table includes applying a trigger lock to another table.

8. (Original) The method of Claim 1, wherein the original table includes a table name, and wherein the step of substituting the reorganized table for the original table further comprises renaming the original table another name and naming the reorganized table the table name.

9. (Original) The method of Claim 1, further comprising archiving the original table.

10. (Original) The method of Claim 1, wherein the copying of the data of the original table to the reorganized table further comprises creating an original synchronization point, after which the records of modifications are collected.

11. (Original) The method of Claim 1, wherein before the application of the second trigger lock, the original table and the reorganized table are in synchronization with one another.

12. through 18. (Cancelled).

19. (Previously presented) A method of reorganizing an object in a database, the method comprising:

reorganizing an original object by copying data from the original object to a reorganized object; and

applying a trigger lock to the original object, the trigger lock blocking data modification operations from modifying the original object while allowing other operations to access the original object, wherein additional more-restrictive locks to the original object are not needed during the method of reorganizing the original object, thereby providing clients of the original object continuous access to the data during the reorganization through at least the other operations allowed by the trigger lock.

20. (Original) The method of Claim 19, wherein the other operations include one or more read-only operations.

21. (Original) The method of Claim 19, wherein the other operations include one or more structural modification operations.

22. (Original) A method of reorganizing an object in a database file, the method comprising:

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reorganizing an original object by copying data from the original object to a reorganized object; and

applying a trigger lock to the reorganized object, the trigger lock blocking data modification operations from modifying the reorganized object, while allowing other operations to access the reorganized object.

23. (Original) The method of Claim 22, wherein the other operations include one or more read-only operations.

24. (Original) The method of Claim 22, wherein the other operations include one or more structural modification operations.

25. (Original) The method of Claim 22, wherein the one or more structural modification operations include consecutive data definition language operations.

26. through 29. (Cancelled).

30. (Previously presented) A reorganization system, comprising:

at least one database file having a table of data and a log file;

a database management system communicating with the at least one database file, thereby governing the modification of the data in the table; and

a reorganization application communicating with the database management system to access the table and communicating with the database file to access the log file, wherein the reorganization application is configured to copy the data of the table to a reorganized table, to apply modifications from the log file corresponding to modifications to the table during the copying of the data, and to substitute the reorganized table for the table, thereby reorganizing the data of the table, wherein the reorganization application is further configured to apply a trigger lock to the table, thereby blocking select data modification language operations while allowing at least read-only operations, wherein additional more-restrictive locks to the table are not needed during reorganization of the table, thereby providing clients of the table continuous access to the data during the reorganization through at least the other operations allowed by the trigger lock.

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31. (Cancelled).

32. (Previously presented) A reorganization application for reorganizing an object in a database, the reorganization application comprising an execution thread which reorganizes an original object by copying data of the original object to a reorganized object, and which applies a trigger lock to the original object, wherein the trigger lock blocks data modification operations from modifying the original object while allowing other operations to access the original object, wherein additional more-restrictive locks to the original object are not needed during reorganization of the original object, thereby providing clients of the original object continuous access to the data during the reorganization through at least the other operations allowed by the trigger lock.

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33. (Original) The reorganization application of Claim 32, wherein the other operations include one or more read-only operations.

34. (Original) The reorganization application of Claim 32, wherein the other operations include one or more structural modification operations.

35. (Original) A reorganization application for reorganizing an object in a database, the reorganization application comprising an execution thread which reorganizes an original object by copying data of the original object to a reorganized object, and which applies a trigger lock to the reorganized object, wherein the trigger lock blocks data modification operations from modifying the reorganized object while allowing other operations to access the reorganized object.

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36. (Original) The reorganization application of Claim 35, wherein the other operations include one or more read-only operations.

37. (Original) The reorganization application of Claim 35, wherein the other operations include one or more structural modification operations.

38. (Original) The method of Claim 35, wherein the one or more structural modification operations include consecutive data definition language operations.

39. (Cancelled).

40. (Currently Amended) A reorganization application for reorganizing an object in a database, the reorganization application comprising an execution thread which reorganizes an original object by copying data of the original object to a reorganized object and which substitutes the reorganized object for the original object, wherein the execution thread also allows read-only access to the data during the substitution of the reorganized object for the original object while blocking other access to the data.

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41. (Original) The reorganization application of Claim 40, wherein the read-only access to the data includes read-only access during multiple data definition language operations.

42. through 48 (Cancelled).

49. (Previously presented) The reorganization system of Claim 30, wherein the reorganization application is further configured to apply a trigger lock to the reorganized table, thereby blocking select data modification language operations while allowing one of one or more read-only operations and one or more data definition language operations.

SUMMARY OF INTERVIEW

In a telephonic communication on August 6, 2003, between Examiner Le and Attorney John Grover, the Examiner requested Applicants to fax the February 27, 2003 Office Action to the United States Patent and Trademark Office.